

Supplemental Materials

Table S1. RMSDs of the backbone atoms in different segments of Bcl-xL in the simulations using different parameters with reference to the apo-Bcl-xL crystal structure (PDBID: 1MAZ).

Simulation System	$\alpha 1$ (4–18)	$\alpha 2$ (86–98)	$\alpha 3$ (104–111)	$\alpha 4$ (119–131)
1MAZ cMD	1.65 $\pm$ 0.38	1.24 $\pm$ 0.21	2.23 $\pm$ 0.86	1.84 $\pm$ 0.48
1MAZ low boost	1.94 $\pm$ 0.81	1.28 $\pm$ 0.25	3.89 $\pm$ 1.06	1.95 $\pm$ 0.65
1MAZ high boost	2.10 $\pm$ 0.37	1.45 $\pm$ 0.25	3.13 $\pm$ 0.87	2.72 $\pm$ 0.72
2BZW cMD	1.75 $\pm$ 0.34	0.82 $\pm$ 0.21	2.83 $\pm$ 1.00	2.39 $\pm$ 1.44
2BZW low boost	2.77 $\pm$ 1.19	1.43 $\pm$ 0.46	5.51 $\pm$ 2.44	2.57 $\pm$ 0.90
2BZW high boost	5.29 $\pm$ 2.44	1.56 $\pm$ 0.34	4.24 $\pm$ 0.95	3.62 $\pm$ 1.01
1MAZ cosolvent cMD	1.82 $\pm$ 0.44	1.40 $\pm$ 0.18	2.06 $\pm$ 0.67	1.73 $\pm$ 0.55
1MAZ cosolvent low boost	2.73 $\pm$ 0.87	0.95 $\pm$ 0.25	7.86 $\pm$ 2.13	8.61 $\pm$ 3.58
1MAZ cosolvent high boost	2.76 $\pm$ 1.42	1.83 $\pm$ 1.39	6.57 $\pm$ 1.88	4.96 $\pm$ 2.18
2BZW cosolvent cMD	1.08 $\pm$ 0.29	0.67 $\pm$ 0.14	3.60 $\pm$ 1.40	1.75 $\pm$ 0.67
2BZW cosolvent low boost	3.68 $\pm$ 1.75	1.98 $\pm$ 0.83	7.73 $\pm$ 1.77	5.39 $\pm$ 2.91
2BZW cosolvent high boost	2.46 $\pm$ 0.78	1.14 $\pm$ 0.40	8.38 $\pm$ 3.67	7.25 $\pm$ 3.43
Simulation System	$\alpha 5$ (137–156)	$\alpha 6$ (162–176)	$\alpha 7$ (188–192)	all (1–196)
1MAZ cMD	0.78 $\pm$ 0.11	1.64 $\pm$ 0.40	2.23 $\pm$ 0.54	1.99 $\pm$ 0.27
1MAZ low boost	0.78 $\pm$ 0.17	1.30 $\pm$ 0.44	1.84 $\pm$ 0.60	2.23 $\pm$ 0.30
1MAZ high boost	1.07 $\pm$ 0.19	1.85 $\pm$ 0.63	4.21 $\pm$ 1.44	3.33 $\pm$ 0.51
2BZW cMD	0.68 $\pm$ 0.12	1.10 $\pm$ 0.34	1.14 $\pm$ 0.58	1.97 $\pm$ 0.56
2BZW low boost	0.92 $\pm$ 0.19	1.34 $\pm$ 0.57	1.69 $\pm$ 0.92	2.68 $\pm$ 0.65
2BZW high boost	1.85 $\pm$ 0.57	3.73 $\pm$ 1.74	4.69 $\pm$ 1.59	4.71 $\pm$ 1.00
1MAZ cosolvent cMD	0.70 $\pm$ 0.16	1.79 $\pm$ 0.44	1.60 $\pm$ 0.56	2.05 $\pm$ 0.31
1MAZ cosolvent low boost	1.44 $\pm$ 0.28	3.87 $\pm$ 3.08	3.33 $\pm$ 1.69	5.61 $\pm$ 1.84
1MAZ cosolvent high boost	1.96 $\pm$ 1.06	3.42 $\pm$ 2.08	5.70 $\pm$ 3.66	5.10 $\pm$ 1.86
2BZW cosolvent cMD	0.68 $\pm$ 0.10	1.15 $\pm$ 0.39	1.61 $\pm$ 0.50	1.95 $\pm$ 0.46
2BZW cosolvent low boost	1.92 $\pm$ 0.85	3.78 $\pm$ 1.85	8.97 $\pm$ 5.09	5.64 $\pm$ 1.94
2BZW cosolvent high boost	1.26 $\pm$ 0.38	2.85 $\pm$ 1.04	5.17 $\pm$ 3.08	5.51 $\pm$ 1.73

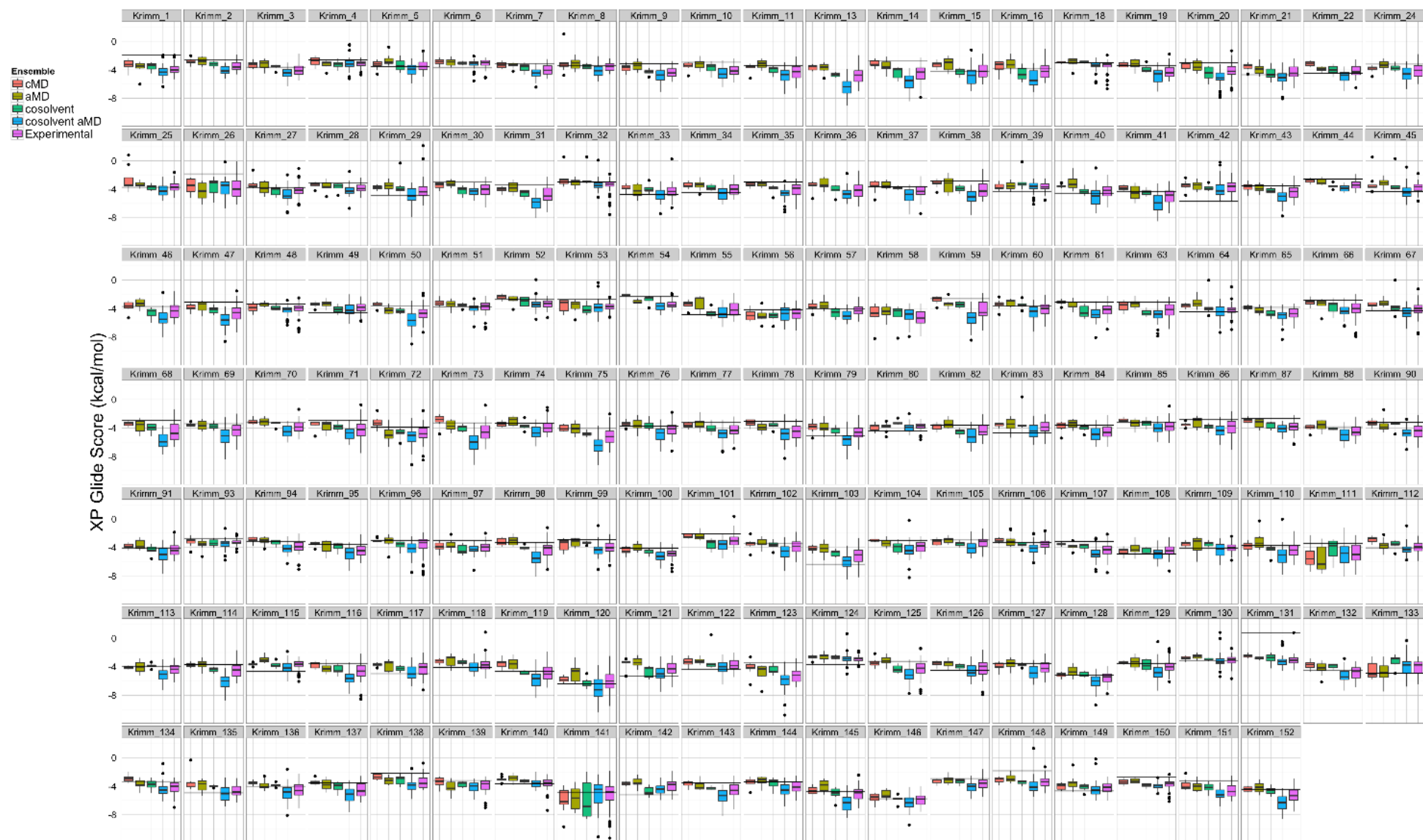


Figure S1. 145 decoys docked against the simulated and experimental structure ensembles.